Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (canceled)

2. (currently amended) The automatic analyzer according to ~~claim 1~~ claim 5, further comprising an agitation mechanism for stirring a reagent within said reagent vessel.

3. (currently amended) The automatic analyzer according to ~~claim 1~~ claim 5, wherein said approximate formula is prepared according to the least-squares method.

4. (canceled)

5. (currently amended) An automatic analyzer, including:

a reagent vessel for containing a reagent;

a pipette probe that has a liquid surface detection function and dispenses a reagent from said reagent vessel;

a reaction vessel for containing a reagent that is dispensed from said pipette probe;

an analysis mechanism for measuring a reaction between a reagent and a sample within said reaction vessel;

a storage means for memorizing liquid surface position information that is acquired by said liquid surface detection function;

a liquid surface estimation mechanism for estimating the current liquid surface height derived from an approximate formula curve based on liquid surface height changes that occur during a period of the first several tens of tests for analysis; and

a controller for controlling a dispensing operation of said pipette probe in accordance with the result of liquid surface estimation by said liquid surface estimation mechanism~~The automatic analyzer according to claim 1~~,

further comprising a mechanism for automatically adjusting the liquid surface estimation result estimated by said liquid surface estimation mechanism based on an amount of a carryover that remains on the outer circumferential surface of said pipette probe.

6. (currently amended) An automatic analyzer, including:

a reagent vessel for containing a reagent;

a pipette probe that has a liquid surface detection function and dispenses a reagent from said reagent vessel;

a reaction vessel for containing a reagent that is dispensed from said pipette probe;

an analysis mechanism for measuring a reaction between a reagent and a sample within said reaction vessel;

a storage means for memorizing liquid surface position information that is acquired by said liquid surface detection function;

a liquid surface estimation mechanism for estimating the current liquid surface height derived from an approximate formula curve based on liquid surface height changes that occur during a period of the first several tens of tests for analysis; and

a controller for controlling a dispensing operation of said pipette probe in accordance with the result of liquid surface estimation by said liquid surface estimation mechanism~~The automatic analyzer according to claim 1~~,

further comprising a mechanism for automatically adjusting the liquid surface estimation result estimated by said liquid surface estimation mechanism based on an amount of reagent evaporation from a reagent vessel.

7. (currently amended) The automatic analyzer according to ~~claim 1~~ claim 5, further comprising a mechanism for cleaning a pipette probe more extensively during dispensing than in a normal dispensing operation if a difference greater than predefined exists between the liquid surface height estimated by said liquid surface estimation mechanism and the liquid surface height measured by said liquid surface detection function.

8. (previously presented) The automatic analyzer according to claim 2, wherein said approximate formula is prepared according to the least-squares method.

9. (currently amended) An automatic analyzer, including:

a reagent vessel for containing a reagent;

a pipette probe that has a liquid surface detection function and dispenses a reagent from said reagent vessel;

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a reaction vessel for containing a reagent that is dispensed from said pipette probe;

an analysis mechanism for measuring a reaction between a reagent and a sample within said reaction vessel;

a storage means for memorizing liquid surface position information that is acquired by said liquid surface detection function;

a liquid surface estimation mechanism for estimating the current liquid surface height derived from an approximate formula curve based on liquid surface height changes that occur during a period of the first several tens of tests for analysis; and

a controller for controlling a dispensing operation of said pipette probe in accordance with the result of liquid surface estimation by said liquid surface estimation mechanism~~The automatic analyzer according to claim 2~~,

further comprising an agitation mechanism for stirring a reagent within said reagent vessel; and

~~further comprising~~ a mechanism for automatically adjusting the liquid surface estimation result estimated by said liquid surface estimation mechanism based on an amount of a carryover that remains on the outer circumferential surface of said pipette probe.

10. (currently amended) An automatic analyzer, including:

a reagent vessel for containing a reagent;

a pipette probe that has a liquid surface detection function and dispenses a reagent from said reagent vessel;

a reaction vessel for containing a reagent that is dispensed from said pipette probe;

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an analysis mechanism for measuring a reaction between a reagent and a sample within said reaction vessel;

a storage means for memorizing liquid surface position information that is acquired by said liquid surface detection function;

a liquid surface estimation mechanism for estimating the current liquid surface height derived from an approximate formula curve based on liquid surface height changes that occur during a period of the first several tens of tests for analysis; and

a controller for controlling a dispensing operation of said pipette probe in accordance with the result of liquid surface estimation by said liquid surface estimation mechanism~~The automatic analyzer according to claim 3~~,

wherein said approximate formula is prepared according to the least-squares method,

further comprising a mechanism for automatically adjusting the liquid surface estimation result estimated by said liquid surface estimation mechanism based on an amount of a carryover that remains on the outer circumferential surface of said pipette probe.

11. (previously presented) An automatic analyzer, including:

a reagent vessel for containing a reagent;

a pipette probe that has a liquid surface detection function and dispenses a reagent from said reagent vessel;

a reaction vessel for containing a reagent that is dispensed from said pipette probe;

an analysis mechanism for measuring a reaction between a reagent and a sample within said reaction vessel;

<u>a storage means for memorizing liquid surface position information that is
acquired by said liquid surface detection function;</u>

<u>a liquid surface estimation mechanism for estimating the current liquid surface
height derived from an approximate formula curve based on liquid surface height
changes that occur during a period of the first several tens of tests for analysis; and</u>

<u>a controller for controlling a dispensing operation of said pipette probe in
accordance with the result of liquid surface estimation by said liquid surface
estimation mechanism</u>~~The automatic analyzer according to claim 2~~,

<u>further comprising an agitation mechanism for stirring a reagent within said
reagent vessel; and</u>

~~further comprising~~ a mechanism for automatically adjusting the liquid surface
estimation result estimated by said liquid surface estimation mechanism based on an
amount of reagent evaporation from a reagent vessel.

12. (previously presented) The automatic analyzer according to claim 3,
further comprising a mechanism for automatically adjusting the liquid surface
estimation result estimated by said liquid surface estimation mechanism based on an
amount of reagent evaporation from a reagent vessel.

13. (previously presented) The automatic analyzer according to claim 2,
further comprising a mechanism for cleaning a pipette probe more extensively during
dispensing than in a normal dispensing operation if a difference greater than
predefined exists between the liquid surface height estimated by said liquid surface
estimation mechanism and the liquid surface height measured by said liquid surface
detection function.

14. (previously presented) The automatic analyzer according to claim 3, further comprising a mechanism for cleaning a pipette probe more extensively during dispensing than in a normal dispensing operation if a difference greater than predefined exists between the liquid surface height estimated by said liquid surface estimation mechanism and the liquid surface height measured by said liquid surface detection function.

15. (previously presented) The automatic analyzer according to claim 5, further comprising a mechanism for cleaning a pipette probe more extensively during dispensing than in a normal dispensing operation if a difference greater than predefined exists between the liquid surface height estimated by said liquid surface estimation mechanism and the liquid surface height measured by said liquid surface detection function.

16. (previously presented) The automatic analyzer according to claim 6, further comprising a mechanism for cleaning a pipette probe more extensively during dispensing than in a normal dispensing operation if a difference greater than predefined exists between the liquid surface height estimated by said liquid surface estimation mechanism and the liquid surface height measured by said liquid surface detection function.

17. (previously presented) The automatic analyzer according to claim 8, further comprising a mechanism for cleaning a pipette probe more extensively during dispensing than in a normal dispensing operation if a difference greater than

predefined exists between the liquid surface height estimated by said liquid surface estimation mechanism and the liquid surface height measured by said liquid surface detection function.

18. (previously presented) The automatic analyzer according to claim 9, further comprising a mechanism for cleaning a pipette probe more extensively during dispensing than in a normal dispensing operation if a difference greater than predefined exists between the liquid surface height estimated by said liquid surface estimation mechanism and the liquid surface height measured by said liquid surface detection function.

19. (previously presented) The automatic analyzer according to claim 10, further comprising a mechanism for cleaning a pipette probe more extensively during dispensing than in a normal dispensing operation if a difference greater than predefined exists between the liquid surface height estimated by said liquid surface estimation mechanism and the liquid surface height measured by said liquid surface detection function.

20. (previously presented) The automatic analyzer according to claim 11, further comprising a mechanism for cleaning a pipette probe more extensively during dispensing than in a normal dispensing operation if a difference greater than predefined exists between the liquid surface height estimated by said liquid surface estimation mechanism and the liquid surface height measured by said liquid surface detection function.

21. (previously presented) The automatic analyzer according to claim 12, further comprising a mechanism for cleaning a pipette probe more extensively during dispensing than in a normal dispensing operation if a difference greater than predefined exists between the liquid surface height estimated by said liquid surface estimation mechanism and the liquid surface height measured by said liquid surface detection function.